



CFMU 2012 REQUIREMENTS

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1.42 Released	25 June 2012	K Breivik	Correction of Translation Tables to include the 'Z' in all cases when the translation requires insertion of NAV/ or COM/ or DAT/ Correction of AFP example Correction of the de-fault transition date as modified by the FPL2012 Task Force Clarification of REG/ translation

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Review Table

Edition No.	Review type, scope, depth & focus	Reviewers	Date	Conclusion

Amendment Registration

Location (Old)	Add / Del / Mod	CR	Remark

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REFERENCES

1. IFPS and RPL Dictionary of Messages, edition v14.0002.001, dated 20 April 2010
2. IFPS and RPL Dictionary of Messages ICAO 2012 Special Edition, edition 2012 v2.001, dated August 2011.
3. CFMU Handbook - ATFCM Users Manual, ATFM_MAN, Part Edition 14.0, March 2009.
4. EUROCONTROL Specification for On-Line Data Interchange (OLDI), Edition 4.2, Dec 2010
5. EUROCONTROL Specification for ATS Data Exchange Presentation (ADEXP), Edition 3.1, July 2011.
6. CFMU Flight Progress Messages, Edition 1.7, January 2010
7. CFMU Handbook -IFPS User Manual, IFPS_MAN, Part Edition 15.0, March 2011.

TERMINOLOGY

Old / New the provisions of PANS-ATM (Doc.4444) applicable before and after the 15th November 2012 transition date respectively

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1 Introduction

1.1 Purpose

- (1) This document contains a description of the changes required within the CFMU systems and their related data exchanges in order to comply with the modifications to the PANS-ATM Doc.4444 as published by ICAO in State Letter AN 13/2.1-08/50, dated 25 June 2008.
- (2) The document includes changes required as a result of:
 - new and modified field content syntax definitions;
 - modifications necessary to the CFMU operational processes as a consequence of the Doc.4444 amendments;
 - the need to facilitate States and AOs in achieving a smooth transition to the new format

1.2 Scope

- (3) Only the messages that are part of the set of data-interchange messages between CFMU and ATC or AO systems are considered.
- (4) Messages and fields not impacted by the changes to Doc.4444 are not included in this document.
- (5) Messages exchanged internally between CFMU systems are not included.
- (6) The impact upon client systems either internal (DWH, SAFA) or external, including recipients of CFMU log/data files (Data Warehouse), are not included.
- (7) The changes that may be required in CHMI and /or Portal displays to accommodate additional or longer data fields etc. are not included.

1.3 Message Description Method

- (8) Syntax is described using a notation similar to BNF (Backus Nauer Form) notation. Each data element consists of a number of tokens, which can be an identifier, a literal or an operator.
- (9) An identifier can be up to 64 characters long. It is used to reference the name of a constituent data element.
- (10) A literal is a number of characters enclosed in double quotes.
- (11) An operator is a token reserved to denote one of the following operations:

a) **selection** : The operator '|' is used to denote the selection. The notation $A | B$ means "either A or B are present"

b) **iteration** : The operators '{', '}' are used to denote the iteration. The notation $X\{A\}Y$ means "A can be repeated equal or greater than X times and equal or less than Y times". X and Y are integers equal or greater than zero. If X is not present it is assumed to be zero. If Y is not present it is assumed to be the infinity.

c) **option** : The operators '[', ']' are used to denote the option. The notation $[A]$ means "A can be optionally present"

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- d) **concatenation** : The operator '!' is used to denote strict concatenation meaning that no separator is allowed e.g. $A ! B = AB$.
Loose Concatenation: the allowed presence of separators may be Implicit or Explicit.
e.g.
Implicit: ' ' "DCT" point point
Explicit: ' ' !{SEP}!"DCT"!1{SEP}!point!1{SEP}!point

2 CFMU Data Exchanges

2.1 Impacted Exchanges

- (12) The following diagrams and tables indicate all the message exchanges that can be sent to and by the CFMU systems.
- (13) A message exchange, involving external users, whose syntax and/or semantic processing is impacted by the ICAO 2012 amendments is shown in the diagram below with its title indicated in **red bold italic text**. Only these messages and the relevant changes to their syntax & semantic processing will be further elaborated within this document i.e. message exchanges shown in normal text are either not impacted by the changes, syntactically and/or semantically, or are not for external use and therefore are not elaborated further in this document.

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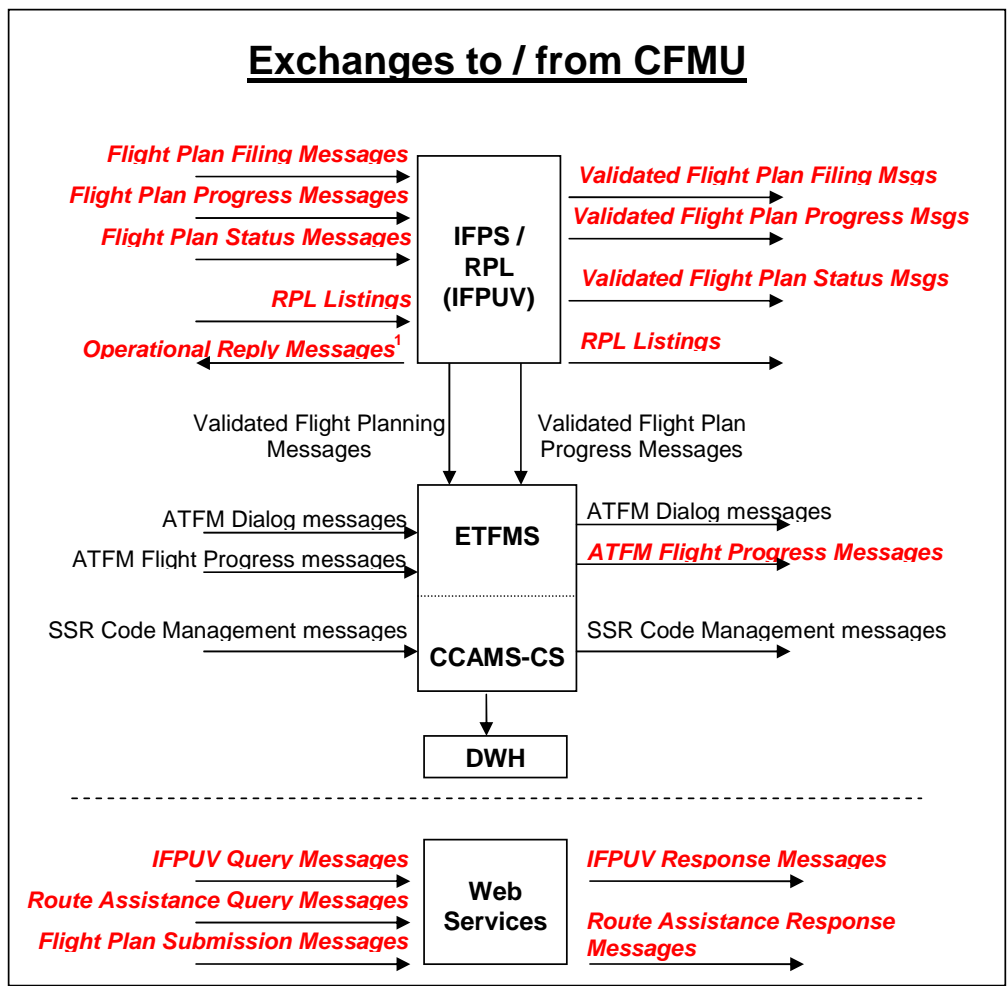


Figure 1. CFMU Interface Exchanges

2.1.1 Received by CFMU

Message	Impact (Y/N)	Message	Impact (Y/N)
Flight Plan Filing Messages			
FPL / IFPL	Y	CHG / ICHG	Y
CNL / ICNL	Y	DLA / IDLA	Y
Flight Plan Status Messages			
DEP / IDEP	Y	ARR / IARR	Y
Flight Plan Progress Messages			
FNM	N	MFS	N

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Message	Impact (Y/N)	Message	Impact (Y/N)
AFP / IAFP	Y		
ATFM Dialogue Messages			
SMM	N	SPA	N
SRJ	N	RFI	N
SWM	N	REA	N
FCM	N	RJT	N
ATFM Flight Progress Messages			
APR	N	DPI	N
FSA	N		
SSR Code Management Messages			
COR	N	CRE	N
Error Messages			
ERR	N		

2.1.2 Output by CFMU

Message	Impact (Y/N)	Message	Impact (Y/N)
Flight Plan Filing Messages			
FPL / IFPL	Y	CHG / ICHG	Y
CNL / ICNL	Y	DLA / IDLA	Y
Flight Plan Status Messages			
DEP / IDEP	Y	ARR / IARR	Y
Flight Plan Progress Messages			
APL / IAPL	Y	ACH / IACH	Y
Operational Reply Messages			
ACK	N	MAN	N
REJ	Y ¹		
ATFM Dialogue Messages			
SAM	N	SRM	N

¹ The basic syntax of the REJ messages will remain unchanged however new error indications/codes may be present in the REJ message.

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Message	Impact (Y/N)	Message	Impact (Y/N)
SLC	N	SIP	N
FLS	N	DES	N
RRP	N	RRN	N
ATFM Flight Progress Messages			
EFD	Y	FUM	N
SSR Code Management Messages			
CAM	N	CCM	N
Error Messages			
ERR	N		

3 Field Definitions & Related Changes

3.1 Field 10a - Equipment & Capabilities

Usage: ADEXP : -CEQPT RPL: None

[UR.FPL.CEQPT.001]

(14) Syntax:

"N" | (1 { "A" | "B" | "C" | "D" | "E1" | "E2" | "E3" | "F" | "G" | "H" | "I" | "J1" | "J2" | "J3" | "J4" | "J5" | "J6" | "J7" | "K" | "L" | "M1" | "M2" | "M3" | "O" | "P1" | "P2" | "P3" | "P4" | "P5" | "P6" | "P7" | "P8" | "P9" | "R" | "S" | "T" | "U" | "V" | "W" | "X" | "Y" | "Z" })

Description: The descriptor "N" or one or more of the listed descriptors without repetition, therefore a theoretical limit of 64 characters.

Note Change: Use of two character descriptors including the use of digits.

The following descriptors will no longer be valid: "E", "J", "M", "P", "Q".

[UR.FPL.CEQPT.002]

(15) If the descriptor "Z" is present then one or more of the following elements shall be present in Field 18: "COM/", "NAV/", "DAT/" .

[UR.FPL.CEQPT.003]

(16) If the descriptor "R" is present the indicator "PBN/" shall be present in Field 18.

3.1.1 B-RNAV Checking

CFMU has received traffic management requirements based on an aircrafts B-RNAV capability i.e. routing constraints etc.

[UR.FPL.CEQPT.004] new (added in CTOR)

The IFPS mechanisms should be adapted such that compliance with B-RNAV is only achieved when the indicator 'R' is present within Field 10a plus one or more of the PBN/ indications B1, B2, B3, B4, B5.

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3.2 Field 10b - Surveillance Equipment & Capabilities

Usage: ADEXP: -SEQPT RPL: None

[UR.FPL.SEQPT.001]

(17) Syntax:

"N" | (1{ ("I" | "P" | "X") | "A" | "C" }3 | (1{ "A" | "C" | "E" | "H" | "L" | "S" }6)) [1{ "B1" | "B2" | "D1" | "G1" | "U1" | "U2" | "V1" | "V2" }8]

Description: The descriptor 'N' or, either one or more of the descriptors 'I', 'P', 'X', 'A', 'C' with 'I', 'P', 'X' being mutually exclusive i.e. only one may be present, or one or more of the descriptors 'A', 'C', 'E', 'H', 'L', 'S'. Plus optionally one or more of the descriptors 'B1', 'B2', 'D1', 'G1', 'U1', 'U2', 'V1', 'V2' without repetition. A total limit of 20 characters shall be applied.

Note Change: In addition to the new descriptors (inc. the use of digits), the following descriptor will no longer be valid: "D".

3.2.1 Mode S Checking

The IFPS checks the profile of a flight to determine whether or not a Mode S equipped flight remains entirely within Mode S airspace and if so IFPS adds the IFP/MODESASP indicator to the flight plan distributed to ATC units.

[UR.FPL.SEQPT.002]new (added in CTOR)

The IFPS mechanisms should be adapted such that compliance with Mode S checking can be achieved when one or more of the indications 'E', 'H', 'L', 'S' or 'I' is present in Field 10b.

3.3 Field 10 & AFTN Line Limit

The PANS-ATM amendment to Field 10, as indicated above, can result in a total Field 10 length greater than the 69 character limit allowed by AFTN.

Field 10 can therefore theoretically contain more than 69 characters in one field i.e. without a space character which would normally be used in determining the position of a line break. The IFPS system needs to be adapted to ensure that on output via AFTN links the 69 character line limit can be respected in all cases. The following changes to IFPS logic for the creation of output via AFTN are therefore required.

NOTE: It should be noted that the modification to IFPS required here is intended to ensure the concerned message will comply with AFTN limitations and should therefore be received by the addressee. It is recognised that, as a result of this change, the format of the received message will no longer be compliant with 'normal' FPL message format and will probably cause local processing difficulties. The modification described here for IFPS does not represent a solution agreed by ICAO for worldwide application. It does however represent a solution that should at least enable such a message to be received as oppose to failing within a comms centre.

[UR.FPL.AFTN.001]new (added in CTOR)

IFPS should ensure that no more than 69 characters per line are created for messages to be transmitted via AFTN. Where a break is required the normal end of line characters (CR CR LF, as indicated in the Flight Plan Form in Doc.4444) will be inserted immediately before one of the following characters, in order of priority:

- the last preceding '-' (hyphen) character if not at the beginning of the line;
- the last preceding 'space' character;
- the last preceding '/' character.

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3.4 Field 15

PANS-ATM amendment includes the ability to use a 5 letter waypoint designator as the reference for a significant point provided by bearing and distance. This however does not represent a change for IFPS whose syntax (input & output) definition has always allowed the use of a waypoint.

3.5 Field 18 - Other Information

3.5.1 Input to IFPS

Usage: ADEXP: see individual field definitions below RPL: Record 4

[UR.FPL.F18.001]

(18) Syntax:

"0" | (1{"STS/" | "PBN/" | "EUR/" | "NAV/" | "COM/" | "DAT/" | "SUR/" | "DEP/" | "DEST/" | "DOF/" | "REG/" | "EET/" | "SEL/" | "TYP/" | "CODE/" | "RVR/" | "DLE/" | "OPR/" | "ORGN/" | "PER/" | "ALTN/" | "RALT/" | "TALT/" | "RIF/" | "RMK/" | "STAYINFO" | "RFP/" })

Description: Either the descriptor "0" or one or more of the listed Field 18 elements without repetition.

Note: The 'STAYINFO' element is only accepted for flights which remain entirely within the IFPZ.

[UR.FPL.F18.002]

(19) An indicator shall only be accepted once, with the exception of the STAYINFO which, by definition, may appear up to 9 times. If duplicate indicators are detected their contents shall be concatenated within a single occurrence of the indicator but with a space inserted between the two data streams. This shall apply to the following indicators: STS/, NAV/, COM/, DAT/, SUR/, EET/, TYP/, DLE/, ALTN/, RALT/, TALT/, RMK/.

However, if duplicates of the following indicators are detected an error status shall be raised: DEP/, DEST/, DOF/, OPR/, RVR/, SEL/, REG/, PBN/, CODE/, ORGN/, PER/, RFP/.

[UR.FPL.F18.003]

(20) An unpublished indicator i.e. one not listed above, shall be accepted by IFPS and included in output messages.

[UR.FPL.F18.004]

(21) The order in which the indicators are received by IFPS shall not be checked.

3.5.2 Output from IFPS

[UR.FPL.F18.005]

(22) Syntax:

"0" | (1{ "STS/" | "PBN/" | "EUR/" | "NAV/" | "COM/" | "DAT/" | "SUR/" | "DEP/" | "DEST/" | "DOF/" | "REG/" | "EET/" | "SEL/" | "TYP/" | "CODE/" | "RVR/" | "IFP/" | "DLE/" | "OPR/" | "ORGN/" | "PER/" | "ALTN/" | "RALT/" | "TALT/" | "SRC/" | "RIF/" | "RMK/" | "STAYINFO" | "RFP/" | "AWR/" })

Description: Either the descriptor "0" or one or more of the listed indicators.

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Note: The EUR/ indicator as currently defined will not be output by IFPS as it only contains the PROTECTED indication which is never output. It is however maintained in this list for completeness.

[UR.FPL.F18.006]

- (23) The indicators "SRC/", "AWR/" and "IFP/" shall not be output by IFPS to unknown addresses provided via the re-addressing function i.e. to unknown 'AD' line addressees.

[UR.FPL.F18.007]

- (24) The indicators shall be output by IFPS in the order in which they are listed above.

[UR.FPL.F18.008]

- (25) Any unpublished indicator(s) i.e. ones not belonging to the list above, shall be output at the end of the list.

3.5.3 STS/

Usage: ADEXP: -STS RPL: Record '4'

[UR.FPL.F18.009]

Syntax:

["ALTRV" | "ATFMX" | "FFR" | "FLTCK" | "HAZMAT" | "HEAD" | "HOSP" | "HUM" |
"MARSA" | "MEDEVAC" | "NONRVSM" | "SAR" | "STATE"]

Description: One or more of the listed descriptors without repetition.

Note Change: In addition to the new descriptors the following old descriptors will no longer be valid: "ATFMEXEMPTAPPROVED", "EMER".

[UR.FPL.F18.010]

- (26) The descriptors "MEDEVAC" & "FFR" shall be added to the existing "ATFMX" (currently indicated as ATFMEXEMPTAPPROVED), "SAR" and "HEAD" in providing an automatic exemption from ATFCM measures.

[UR.FPL.F18.011]

- (27) The descriptors "MEDEVAC" & "FFR" shall be included in providing a priority treatment in IFPS according to the following:

Systematic Rejection: The IFPS shall not systematically reject messages that contain one or more of the indications: STS/FFR, STS/SAR, STS/MEDEVAC or STS/HOSP.

IFPS Revalidation: Flights departing from outside the IFPZ and/or flights with STS/FFR, STS/SAR, STS/MEDEVAC or STS/HOSP shall not be subject to revalidation suspension and shall fall under the 'Revalidation Advisory' procedure.

Invalid queue priority: Messages containing STS/HEAD, STS/FFR, STS/SAR, STS/MEDEVAC or STS/HOSP shall be given a priority status in the invalid queue.

Warning for Manual Reject: A warning shall be presented to the IFPS Operator when trying to Reject a flight plan containing STS/FFR or STS/MEDEVAC or STS/HOSP or STS/SAR or STS/ATFMX.

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Warning for Manual Suspend: A warning will be presented to the IFPS Operator when trying to manually suspend a flight containing STS/FFR or STS/MEDEVAC or STS/HOSP or STS/SAR or STS/ATFMX

[UR.FPL.F18.012]

- (28) An unpublished descriptor and/or free text will not be accepted within the STS/ indicator and shall raise an error.

3.5.4 RMK/

Usage: ADEXP: -RMK RPL: Record '4'

[UR.FPL.F18.013]

- (29) Syntax:
1 {LIM_CHAR}

Description: Free text.

3.5.5 RVR/

Usage: ADEXP: -RVR RPL: Record '4'

[UR.FPL.F18.014]

- (30) Syntax:
1 {DIGIT} 3

Description: One to three digits.

3.5.6 RFP/

Usage: ADEXP: -RFP RPL: Record '4'

[UR.FPL.F18.015]

- (31) Syntax:
"Q" + 1{ "1" | "2" | "3" | "4" | "5" | "6" | "7" | "8" | "9" }1

Description: The letter 'Q' followed by a digit from 1 to 9.

3.5.7 SRC/

Usage: ADEXP: -SRC RPL: Record '4'

[UR.FPL.F18.016]

- (32) Syntax:
1{ "RPL" | "FPL" | "AFIL" | "MFS" | "FNM" | "RQP" | "AFP" | "DIV" + (icao aerodrome | 'ZZZZ') }1

Description: One of the listed descriptors. The DIV (Diversion) descriptor will only appear in message types APL & ACH.

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3.5.8 IFP/

Usage: ADEXP: -IFP RPL: Record '4'

[UR.FPL.F18.017]

(33) Syntax:
1{"ERROUTRAD" | "ERROUTWE" | "ERROUTE" | "ERRTYPE" | "ERRLEVEL" |
"ERREOBT" | "NON833" | "833UNKNOWN" | "MODESASP" | "RVSMVIOLATION" |
"NONRVSM" | "RVSMUNKNOWN"}

Description: One or more of the descriptors listed.

3.5.9 AWR/

Usage: ADEXP: -AWR RPL: Record '4'

[UR.FPL.F18.018]

(34) Syntax:
"R" ! 1{ "1" | "2" | "3" | "4" | "5" | "6" | "7" | "8" | "9" } 1

Description: The letter 'R' followed immediately by a digit from 1 to 9

3.5.10 STAYINFO_n/

Usage: ADEXP: -STAYINFO RPL: Record '4'

[UR.FPL.F18.019]

(35) ICAO Syntax:
"STAYINFO" ! 1{ "1" | "2" | "3" | "4" | "5" | "6" | "7" | "8" | "9" } 1 ! "/" ! 1{LIM_CHAR}

Description: free text.

May only be present in the flight plan if the flight takes place entirely within the IFPZ.

Multiple occurrences (up to 9) of the STAYINFO_n/ descriptor are permitted with the 'n' indicating an incremental sequence.

3.5.11 EUR/

Usage: ADEXP: -EUR (New Field) RPL: Record '4'

[UR.FPL.F18.020]

(36) Syntax:
1 { "PROTECTED" }

Description: One or more of the listed descriptors

It should be noted that the PROTECTED indicator is not output by IFPS. ATC units will therefore not receive the EUR/PROTECTED indication.

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3.5.12 PBN/

Usage: ADEXP: -PBN (New Field) RPL: Record '4'

[UR.FPL.F18.021]

- (37) Syntax:
1 { "A1" | "B1" | "B2" | "B3" | "B4" | "B5" | "B6" | "C1" | "C2" | "C3" | "C4" | "D1" | "D2" | "D3" | "D4" | "L1" | "O1" | "O2" | "O3" | "O4" | "S1" | "S2" | "T1" | "T2" } 8

Description: From one to eight of the listed descriptors.

[UR.FPL.F18.022]

- (38) If a "PBN/" indicator is present the descriptor "R" shall be present in Field 10a.

[UR.FPL.F18.041]

- (39) If any of the indicators B1, B2, C1, C2, D1, D2, O1 or O2 are filed, then a "G" must be present in Field 10a.

[UR.FPL.F18.042]

- (40) If any of the indicators B1, B3, C1, C3, D1, D3, O1 or O3 are filed, then a "D" must be present in Field 10a.

[UR.FPL.F18.043]

- (41) If either of the indicators B1 or B4 is filed, then either an "O" or "S" must be present and a "D" must also be present in Field 10a.

[UR.FPL.F18.044]

- (42) If any of the indicators B1, B5, C1, C4, D1, D4, O1 or O4 are filed, then an "I" must be present in Field 10a.

[UR.FPL.F18.045]

- (43) If any of the indicators C1, C4, D1, D4, O1 or O4 are filed, then a "D" must be present in Field 10a.

3.5.13 DAT/

Usage: ADEXP: -DAT RPL: Record '4'

[UR.FPL.F18.023]

- (44) Syntax:
1{LIM_CHAR}50

Note Change: No longer limited to specific descriptors.

In order to provide correct information for display purposes or when required/queried via other formats such as B2B, IFPS will determine if the descriptor 'CPDLCX' is present within DAT/.

3.5.14 SUR/

Usage: ADEXP: -SUR (New Field) RPL: Record '4'

[UR.FPL.F18.024]

- (45) Syntax:
1{LIM_CHAR}50

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3.5.15 DEP/

Usage: ADEXP: -DEPZ RPL: Record '4'

[UR.FPL.F18.025]

(46) Syntax:
(adname [geoid | refid]) | ptid

adname = 1{LIM_CHAR}50

Description: The name of the departure aerodrome (up to 50 characters) plus optionally (for aerodromes not listed in the relevant AIP) the location of the aerodrome given either as bearing and distance from a significant point or as a latitude and longitude.

Or, if the aircraft did not depart from an aerodrome, the first point on the route (given by a Nav. Aid, Waypoint or Marker Beacon designator) or by latitude & longitude.

e.g.

DEP/ MALAHIDE DUB110015
DEP/ MALAHIDE 5327N00608W
DEP/BAGSO
DEP/5327N00608W

[UR.FPL.F18.026]

(47) If the departure aerodrome is indicated by 'ZZZZ' and the location of the aerodrome is provided under DEP/ the information shall be used by the CFMU profile calculation.

3.5.16 DEST/

Usage: ADEXP: -DESTZ RPL: Record '4'

[UR.FPL.F18.027]

(48) Syntax:
(adname [geoid | refid]) | ptid

3.5.17 DLE/

[UR.FPL.F18.028]

(49) Usage: ADEXP: -DLE (New Field) RPL: Record '4'

(50) Syntax:
1{ALPHANUM}11 4{DIGIT}4

Description: a significant point followed by an indication of a time period in hours and minutes.

e.g. DUB0040
DUB1800400030

The STAY indication shall be retained for submission concerning flights that remain entirely within the IFPZ. The rationale for maintaining the STAY as opposed to using the DLE is the following:

- the STAY is implemented within Field 15 where routing/trajectory related information is extracted;

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- b) use of Field 15 and STAY provides the ability to indicate a vertical deviation during the course of the activity;
- c) use of Field 15 and STAY provides the ability to indicate an area (between two points) where the activity will take place as oppose to a single point
- d) use of Field 15 and STAY provides the possibility to indicate an aerodrome where the activity will take place, for example, where a training flight may wish to make some practise approaches;
- e) use of Field 15 and STAY provides the ability to make a correct indication(s) for circular flights i.e. a flight which may pass overhead the "DLE/" point more than once;
- f) the STAY implementation is part of the proposals for the future flight plan (FF_ICE) and trajectory management.

[UR.FPL.F18.029]

- (51) A DLE on a point within the IFPZ shall only be accepted on a point that is either explicitly indicated in F15 or is implicit within a route portion identified in F15, including SID/STAR portions.

[UR.FPL.F18.030]

- (52) A DLE on a point found within Field 15 shall be used by IFPS in the elaboration of the calculated profile by adding the delay to the elapsed time for the route segment immediately following the DLE point.

[UR.FPL.F18.031]

- (53) If the point indicated in the DLE/ is found within Field 15 and is overflown more than once the delay shall be applied to the last occurrence.

[UR.FPL.F18.032]

- (54) If the point indicated in the DLE/ is not found within Field 15 and the Field 15 route contains a single 'unknown' portion (a portion outside the IFPZ, a VFR portion or an OAT portion) then the delay shall be applied to the unknown portion.

[UR.FPL.F18.033]

- (55) If the point indicated in the DLE/ is not found within Field 15 and the Field 15 route contains more than one 'unknown' portions (a portion outside the IFPZ, a VFR portion or an OAT portion) then the delay shall be shared across all segments as oppose to applying it to a single segment.

(Criteria Considered: a wrong guess as to where the delay should be applied could have adverse effects on flight plan distribution time (missing flight plan) as well as Alerting procedures (overdue flight). An equal share of the delay spread amongst all segments is a compromise and means that the calculated profile is more likely to be accurate during the latter phase of flight and will become 100% accurate only at ADES.)

[UR.FPL.F18.046]

- (56) If the point indicated in the DLE/ is not found within Field 15 for a flight that is entirely within the IFPZ and contains no VFR or OAT portions an error status shall be raised.

3.5.18 PER/

Usage: ADEXP: -PER RPL: Record '4'

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[UR.FPL.F18.034]

(57) Syntax:
1 { ["A" | "B" | "C" | "D" | "E" | "H"] } 1

Description: a single letter as specified in 'Aircraft Operations' (PANS-OPS Doc. 8168) indicating the aircraft performance data.

Note Change: Specific designators only.

3.5.19 ALTN/

Usage: ADEXP: -ALTNZ RPL: Record '4'

[UR.FPL.F18.035]

(58) Syntax:
1 {LIM_CHAR} 100

3.5.20 RALT/

Usage: ADEXP: -RALT RPL: Record '4'

[UR.FPL.F18.036]

(59) Syntax:
1 {LIM_CHAR} 100

Description: From one to a hundred characters providing the ICAO four-letter indicators of the en-route alternate aerodromes or the name of the aerodrome(s) plus optionally (for aerodromes not listed in the relevant AIP) the location of the aerodrome(s) given either as bearing and distance from a significant point or as a latitude and longitude.

3.5.21 TALT/

Usage: ADEXP: -TALT (New Field) RPL: Record '4'

[UR.FPL.F18.037]

(60) Syntax:
1 {LIM_CHAR} 100

Description: From one to a hundred characters providing the ICAO four-letter indicators of the take-off alternate aerodromes or the name of the aerodrome(s) plus optionally (for aerodromes not listed in the relevant AIP) the location of the aerodrome(s) given either as bearing and distance from a significant point or as a latitude and longitude.

3.5.22 NAV/

Usage: ADEXP: -NAV RPL: Record '4'

[UR.FPL.F18.038]

(61) Syntax:
1 {LIM_CHAR} 50

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In order to provide correct information for display purposes or when required/queried via other formats such as B2B, IFPS will determine if the descriptors 'RNAVX' and/or 'RNAVINOP' are present within NAV/.

3.5.23 COM/

Usage: ADEXP: -COM RPL: Record '4'

[UR.FPL.F18.039]

- (62) Syntax:
1 {LIM_CHAR} 50

[UR.FPL.F18.050]

- (63) In performing 8.33kHz validation checking, the IFPS shall determine whether the exemption indicator ('EXM833') exists within the COM/ element of Field 18 in an ICAO format flight plan.

3.5.24 TYP/

- (64) An increase to the field length currently imposed by IFPS is proposed to allow multiple aircraft types to be provided in the case of formation flights.

Usage: ADEXP: -TYPZ RPL: Record '4'

[UR.FPL.F18.040]

- (65) Syntax:
1 {LIM_CHAR} 60

3.5.25 ORGN/

- (66) Currently the ORGN/ indicator is not received by IFPS. It is only output by IFPS and contains the transmitting address of the message that was received by IFPS. Amendment 1 includes ORGN/ which means it can now be received by IFPS and may contain an address specified by the Originator which may or may not be the same as the transmitting address of the message. It therefore becomes an 'FPL originator' address managed by the Originator, which may or may not be the transmitting address of the message received by IFPS. The value within the ORGN/ should therefore only be changed by a modification to Field 18 via Field 22 mechanism of a CHG message.

Usage: ADEXP: -ORGN RPL: Record '4'

[UR.FPL.F18.047]

- (67) Syntax:
1 {LIM_CHAR} 30

[UR.FPL.F18.048]

- (68) If received in a FPL message IFPS should retain the received value and provide it in output messages.
If not received within the FPL IFPS shall continue to insert the transmitting address of the received message, as today, however subsequent messages received from different addresses will not automatically change the ORGN address of the FPL.

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3.5.26 REG/

- (69) In order to accept multiple registrations in case of formation flights it was accepted that the current syntax of this field should be extended.

Usage: ADEXP: -REG RPL: Record '4'

[UR.FPL.F18.049] new (added in CTOR)

- (70) Syntax:
1 {LIM_CHAR} 50

4 Associated Messages (CNL DLA CHG ARR DEP RQS RQP)

[UR.FPL.ASSOCMSG.001]

- (71) IFPS shall, upon reception of CNL, CHG, ARR, RQS, RQP messages, accept the inclusion of Field 13b (EOBT). No error shall be raised if not present.

[UR.FPL.ASSOCMSG.002]

- (72) IFPS shall include Field 13b in output messages with title CNL CHG ARR.

[UR.FPL.ASSOCMSG.003]

- (73) IFPS shall accept Field 18 in messages received with title CNL DLA CHG DEP RQS RQP. An error shall be raised if no Field 18 indication is present.

[UR.FPL.ASSOCMSG.004] updated

- (74) IFPS will not modify or take into consideration any modified data shown within the Field 18 indications provided in a CNL, DLA, CHG, DEP, RQS or RQP message. Only the DOF/, if present, will be taken into consideration in associating the message to the appropriate FPL.

[UR.FPL.ASSOCMSG.005]

- (75) IFPS shall include Field 18 containing only the DOF/ indication in all output messages with title CNL DLA CHG DEP.

[UR.FPL.ASSOCMSG.006]

- (76) When processing a CHG message, a modification to Field 18, indicated via a Field 22 element, shall completely replace the previous Field 18 content with the new content provided.

[UR.FPL.ASSOCMSG.007]

- (77) When modifying the content of Field 18 via the Field 22 mechanism e.g. to provide the SRC/ indication, IFPS shall provide the complete Field 18 information applicable to the flight.

[UR.FPL.ASSOCMSG.008]

- (78) Use of the 'NIL' indication within ICAO format amendments to Field 18 elements i.e. via Field 22, will no longer be supported by IFPS.

5 Flight Plan Progress Messages (AFP, APL, ACH)

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5.1 AFP Message

5.1.1 Current Processing

- (79) A change to an item of flight plan data indicated within an AFP message (ICAO or ADEXP format) is accepted today by IFPS as a modification. However, this does not apply to changes within Field 10 indications provided in ICAO format (see example 1 below). Field 10 information can only be modified via ADEXP format using the specific fields created for the purpose (see example 2 below).

Examples:

No.	FPL Content	AFP Content	ACH Content
1. (ICAO)	(FPL-SAS1428-IS - B736/M -SIJ1RWXY/S -ESSA2145 -N0456F360 DKR UN872 EEL/N0449F380 UP174 WOODY/N0446F370 UN872 DENOX UZ319 MOFIL/N0445F360 -LFPG0213 LFPO -DOF/090614 REG/ SEDAC)	(AFP-SAS1428-IS - B738/M -S/S -ESSA2145 -DENOX/2330F370 -N0446F370 DENOX UZ319 MOFIL -LFPG -DOF/090614 REG/ SEGAf)	(ACH-SAS1428 -ESSA2145 -LFPG -9/ B738/M -14/DENOX/2330F370 -15/M082F370 DENOX UZ319 MOFIL -18/DOF/090614 REG/ SEGAf SRC/AFP)
2. (ADEXP)	(FPL-SAS1428-IS - B736/M -SIJ1RWXY/S -ESSA2145 -N0456F360 DKR UN872 EEL/N0449F380 UP174 WOODY/N0446F370 UN872 DENOX UZ319 MOFIL/N0445F360 -LFPG0213 LFPO -DOF/090614 REG/SEDAC)	-TITLE IAFP -ARCID SAS1428 -ADEP ESSA -ARCTYP B738 -EOBD 090614 -ESTDATA -PTID DENOX -ETO 0906142330 -FL F370 -ADES LFPG -BEGIN EQCST -EQPT W/NO -END EQCST -REG SEGAf)	-TITLE IACH -BEGIN ADDR -FAC LFFFSTIP -END ADDR -ADEP ESSA -ADES LFPG -ARCID SAS1428 -ARCTYP B738 -EOBD 090614 -EOBT 2145 -FILTIM 142315 -IFPLID AA02458721 -CEQPT SIJ1RXY -SRC AFP -SEQPT S -WKTRC M -FLTRUL I -FLTTP S -ESTDATA -PTID DENOX -ETO 0906142330 -FL F370 -REG SEGAf -ROUTE N0456F360 DKR UN872 EEL/N0449F380 UP174 WOODY/N0446F370 UN872 DENOX UZ319 MOFIL/N0445F360 -BEGIN RTEPTS -END RTEPTS

Description:

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- (80) Note in example 1 (ICAO format AFPs) how the change to Field 10 is ignored (no change to Field 10 indicated in the ACH) while the other changes, aircraft type and Field 18 data, are recognised and included in the output ACH.
- (81) In example 2 (ADEXP) the EQCST field is used to explicitly indicate changes to Field 10a (in this example an indication that the 'W' i.e. RVSM capability, is not present or no longer serviceable). This is the same mechanism as that used within OLDI exchanges.

5.1.2 Required Processing

[UR.FPL.PROGMSG.001]

- (82) The syntax of the individual fields within AFP, APL, and ACH messages shall be modified in accordance with the new field definitions provided in §3.

[UR.FPL.PROGMSG.002]

- (83) The syntax of the EQCST field should be modified to enable modifications to Field 10b to be included in addition to modifications to Field 10a.

- (84) Syntax:

```
'-' "BEGIN" " EQCST" 1 { eqpt | sureqpt } '-' "END" " EQCST"
```

```
'-' "EQPT" eqptcode ! "/" ! eqptstatus
```

```
eqptcode    ["A" | "B" | "C" | "D" | "E1" | "E2" | "E3" | "F" | "G" | "H" | "I" | "J1" | "J2" |
             "J3" | "J4" | "J5" | "J6" | "J7" | "K" | "L" | "M1" | "M2" | "M3" | "O" | "P1" |
             "P2" | "P3" | "P4" | "P5" | "P6" | "P7" | "P8" | "P9" | "R" | "S" | "T" | "U" | "V" |
             "W" | "X" | "Y" | "Z"]
```

```
eqptstatus  ["EQ" | "NO" | "UN"]
```

```
'-' "SUREQPT" surclass ! "/" ! eqptstatus [ "/" ! sureqptcode]
```

```
surclass 1{"A"|"S"|"ADSB"|"ADSC"}1  where A=Modes A&C; S=ModeS;
                                ADSB=ADS-B; ADSC=ADS-C
```

```
sureqptcode ["A" | "B1" | "B2" | "C" | "D1" | "E" | "G1" | "H" | "I" | "L" | "P" | "S" | "U1" |
             "U2" | "V1" | "V2" | "X"]
```

Description: A list of equipment/capability indicators together with an indication of their operational status. The list may contain NAV/COM related (eqpt) information and/or SUR related (sureqpt).

Surveillance status is described at the level of the type or class of surveillance i.e. Mode A/C, Mode S, ADS-B, ADS-C. When the status is indicated as 'EQ' and indication of the complete capability for the class is expected. When the status is indicated as 'NO' or 'UN' no further information for that class is expected.

5.1.3 Modification of Surveillance Data

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[UR.FPL.PROGMSG.003]

- (85) When a surveillance class is indicated as 'NO' any associated indications shall be removed from the Field 10b (seqpt) field of the flight plan in accordance with the following table.

Class	Indications
A	'A', 'C'
S	'E', 'H', 'I', 'L', 'P', 'S', 'X'
ADSB	'B1', 'B2', 'U1', 'U2', 'V1', 'V2'
ADSC	'D1', 'G1'

- (86) When a surveillance class is indicated as 'EQ' the complete capability for the class is expected to follow.
- (87) When a surveillance class is indicated as 'UN' no further action shall be taken. Any existing indications for that class within the flight data held for the flight shall remain.

[UR.FPL.PROGMSG.004]

- (88) IFPS shall replace all existing indicators for the class concerned by those received.

[UR.FPL.PROGMSG.005]

- (89) IFPS shall raise an error if no capability is provided and none already exists within the flight plan for the class concerned. If none is provided in the message but does exist in the FPD no error shall be raised and this indication will be ignored.

[UR.FPL.PROGMSG.006]

- (90) IFPS shall raise an error if an indicated capability is not in accordance with the indicated class, as described by the table above.

5.1.4 Modification of Other Data

- (91) Modifications, additions, deletions are achieved via ADEXP by inclusion of all data items. A new or modified data item is understood as an update. A 'missing' data item i.e. one that was previously provided but is not included in the message being processed, is understood as a deletion.
- The processing of ADEXP format AFP messages differs from this principle. As an AFP message can be sent under circumstances in which the sending ATC unit is unaware of the complete flight plan data or has not retained the complete data set, it is important that IFPS takes into account only those data items associated with the modifications allowed via AFP.

[UR.FPL.PROGMSG.007]

- (92) IFPS shall ignore data provided within the following fields of an ICAO format AFP message when an associated FPD exists for the flight: Fields 10a, 10b & 18.

[UR.FPL.PROGMSG.008]

- (93) IFPS shall ignore data provided within the following fields of an ADEXP format AFP message when an associated FPD exists for the flight: -CEQPT, -SEQPT.

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[UR.FPL.PROGMSG.009]

- (94) When an FPD exists for a flight IFPS shall accept updates via ADEXP to only the following 'Field 18' fields:
-PBN, -NAV, -COM, -SUR, -DAT, -TYP, -DESTZ, -PER

Examples:

No.	FPL Content	AFP Content	ACH Content
3. (ICAO)	(FPL-SAS1428-IS - B736/M -SIJ1RWXY/SB1 D1 -ESSA2145 -N0456F360 DKR UN872 EEL/N0449F380 UP174 WOODY/N0446F370 UN872 DENOX UZ319 MOPIL/N0445F360 -LFPG0213 LFPO - PBN/B1S1 DOF/090614 REG/SEDAC)	(AFP-SAS1428-IS - B738/M -SIJ1RXY/SB1 -ESSA2145 -DENOX/2330F370 -N0446F370 DENOX UZ319 MOPIL -LFPG - PBN/B1)	(ACH-SAS1428 -ESSA2145 -LFPG -9/ B738/M -14/DENOX/2330F370 -15/M082F370 DENOX UZ319 MOPIL) ▼
4. (ADEXP)	(FPL-SAS1428-IS - B736/M -SIJ1RWXY/SB1 D1 -ESSA2145 -N0456F360 DKR UN872 EEL/N0449F380 UP174 WOODY/N0446F370 UN872 DENOX UZ319 MOPIL/N0445F360 -LFPG0213 LFPO - PBN/B1S1 DOF/090614 REG/SEDAC)	-TITLE IAFP -ARCID SAS1428 -ADEP ESSA -ARCTYP B738 -EOBD 090614 -ESTDATA -PTID DENOX -ETO 090614233000 -FL F370 -ADES LFPG - BEGIN EQCST -EQPT W/NO -EQPT Y/NO - SUREQPT ADSC/NO - END EQCST - PBN B1	-TITLE IACH -BEGIN ADDR -FAC LFFFSTIP -END ADDR -ADEP ESSA -ADES LFPG -ARCID SAS1428 -ARCTYP B738 -EOBD 090614 -EOBT 2145 -FILTIM 142315 -IFPLID AA02458721 -REG SEDAC -CEQPT SIJ1RXY -SEQPT SB1 -SRC AFP -WKTRC M -FLTRUL I -FLTTP S -ESTDATA -PTID DENOX -ETO 090614233000 -FL F370 - PBN B1 -ROUTE N0456F360 DKR UN872 EEL/N0449F380 UP174 WOODY/N0446F370 UN872 DENOX UZ319 MOPIL/N0445F360 -BEGIN RTEPTS -END RTEPTS

Deleted: -18/**PBN/B1**
DOF/090614
REG/SEDAC
SRC/AFP)

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5. (ADEXP)	(FPL-SAS1428-IS -B736/M -SIJ1R WXY/EB1D1 -ESSA2145 -N0456F360 DKR UN872 EEL/N0449F380 UP174 WOODY/N0446F370 UN872 DENOX UZ319 MOPI/N0445F360 -LFPG0213 LFPO -PBN/B1S1 DOF/090614 REG/SEDAC)	-TITLE IAFP -ARCID SAS1428 -ADEP ESSA -ARCTYP B738 -EOBD 090614 -ESTDATA -PTID DENOX -ETO 090614233000 -FL F370 -ADES LFPG -BEGIN EQCST -EQPT W/NO -EQPT Y/NO -SUREQPT S/EQ/S -SUREQPT ADSC/NO -END EQCST -PBN B1 * NOTE: This message, in addition to the previous changes (see example 4.), also changes the Mode S capability from 'E' to 'S'.	-TITLE IACH -BEGIN ADDR -FAC LFFFSTIP -END ADDR -ADEP ESSA -ADES LFPG -ARCID SAS1428 -ARCTYP B738 -EOBD 090614 -EOBT 2145 -FILTIM 142315 -IFPLID AA02458721 -REG SEDAC -CEQPT SIJ1RX -SEQPT SB1 -SRC AFP -WKTRC M -FLTRUL I -FLTTYP S -ESTDATA -PTID DENOX -ETO 090614233000 -FL F370 -PBN B1 -ROUTE N0456F360 DKR UN872 EEL/N0449F380 UP174 WOODY/N0446F370 UN872 DENOX UZ319 MOPI/N0445F360 -BEGIN RTEPTS -END RTEPTS
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5.2 ACH Message

[UR.FPL.PROGMSG.010]

- (95) When modifying the content of Field 18 via the Field 22 mechanism e.g. to provide the SRC/ indication, IFPS shall provide the complete Field 18 information applicable to the flight.

6 ATFM Flight Progress Messages

[UR.FPL.ATFMMSG.001]

- (96) The new ADEXP field “-DLE” will be added to the EFD message output by CFMU.

7 Web Services

- (97) The proposed changes to the format of the query and response exchanges used within the available Web Services (currently 'IFPUV' and 'Route Assistance') shall be provided in due time and under separate cover, for comment, to those engaged within the current Pilot phase. The subsequently agreed modifications, which de facto will encompass many of the modifications proposed in this document, will be included within a later edition of this document as an additional annex and will be communicated as a modification to the appropriate service reference manual for the service concerned.

8 Transition

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- (98) The IFPS needs to be able to modify its behaviour at pre-determined times, as set forth in the Deployment Plan for the CFMU Area, in order to facilitate the transition of flight planning systems (flight plan originator as well as ATC FDPS systems) from the current or 'old' format to the 'new' format compliant with the ICAO modifications to PANS-ATM.

8.1 'Old' & 'New'

8.1.1 General Observations

- (99) Many flight plan indications or field content used currently (referred to as 'old' content, indications or format) are also acceptable within the 'new' format. Therefore a flight plan may be exactly the same in both old and new formats. This is most likely for a flight operated by an aircraft which is not equipped with much of the latest NAV/COM/SUR capabilities. Is the following FPL in old or new format, and does it matter?

e.g.

(FPL-OOABC-I/G
-C182/L-S/C
-EBCV1400
-N0210F060 DCT BUB
-EBBR0040 EBAW
-DOF/090909)

- (100) The process to determine whether or not a message is acceptable, in terms of the 2012 amendments, relies on an analysis of a combination of criteria:
- the syntax of each data element (inc. the presence of completely 'new' descriptors/elements/fields);
 - the semantic combination of certain data items or indications;
 - the CFMU processing status or 'switch'.

8.1.2 Decision Logic

[UR.FPL.2012OLDNEW.001] updated

- (101) The presence of any of the following data items shall be considered as an indication of New content:
- a) In Field 10a : E1, E2, E3, J1, J2, J3, J4, J5, J6, J7, M1, M2, M3, P1, P2, P3, P4, P5, P6, P7, P8, P9;
 - b) In Field 10b : E, H, L, B1, B2, U1, U2, V1, V2, D1, G1;
 - c) In Item 18 : PBN/, SUR/, DLE/, TALT/, EUR/
 - d) In STS/ : ATFMX
 - e) In DAT/ : characters other than S, H, V, M
 - f) A CHG, CNL, DLA, DEP messages containing Field 18 with more than just DOF/

[UR.FPL.2012OLDNEW.002] updated

- (102) The presence of any of the following data items shall be considered as an indication of Old content:
- a) In Field 10a : J, M;
 - b) In Field 10b : D;
 - c) In STS/ : ATFMEXEMPTAPPROVED, free text i.e. any indication other than those specified under § 3.5.3
 - d) In PER/ : Indications other than A, B, C, D, E, H

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[UR.FPL.2012OLDNEW.003]

- (103) IFPS shall raise an error if a mixture of Old and New indications is found in the same message.

[UR.FPL.2012OLDNEW.004]

- (104) IFPS shall raise an error if the processing of an associated message or flight progress message (CHG, DEP, DLA, CNL, AFP) should result in a mixture of Old and New indications within the same flight data.

8.2 Processing Modes

[UR.FPL.2012SWITCH.001] updated

- (105) There are two distinct switches required within the IFPS processing which effectively need to provide three different processing modes.

Mode 1: Acceptance of Old content only

Switch 1 → Mode 2: Acceptance of messages in new format in addition to continuing to accept old format.

Output from IFPS in either:

- i) new + old formats (in accordance with the submitted message format)

OR

- ii) old only (regardless of input format)

as specified by addressee via ENV attribute..

Switch 2 → Mode 3: Acceptance of messages with new content only.

Output from IFPS in either new or old format as specified by addressee via ENV attribute.

[UR.FPL.2012SWITCH.012] new (added in CTOR)

- (106) The RPL system is also required to support the same modes and switches as IFPS enabling the RPL system to make the same transitions. A mechanism, automatic or procedural, should be foreseen to ensure the RPL system will not provide New output while IFPS only accepts Old i.e. IFPS must precede RPL in switching to Mode 2 and cannot revert to Mode 1 if New format RPLs are operational.

- (107) Normally these transitions or switches should be made in synchronization for the two systems however the ability to switch independently is also required where, for example, IFPS may wish to implement the ability to accept New prior to the RPL system doing the same. More importantly, IFPS should have the ability to revert from Mode 3 to Mode 2

[UR.FPL.2012SWITCH.002]

- (108) The IFPUV does not require Mode 1, only Modes 2 and 3 are necessary.

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[UR.FPL.2012SWITCH.003]

- (109) It shall be ensured that other CFMU systems receiving IFPS output and archive data shall be consistent with Mode 2 processing i.e. capable to receive New format, when IFPS switches to Mode 2.

8.3 Output Format Parameter

[UR.FPL.2012SWITCH.004]

- (110) The ENV attributes referred to above shall be implemented as a setting per ANU.
- (111) The setting shall be implemented as a Date&Time.
- (112) Output to be transmitted to an ANU prior to the date and time specified shall be with Old content only i.e. IFPS shall translate New to Old as required. Messages transmitted after the date and time specified shall be in the format in which they were accepted by IFPS.

This means that if the date/time is set to a date prior to 15/11/12 both New and/or Old content may be transmitted to the ANU concerned from that date/time onwards. If set to a date after 15/11/12 only New content should be transmitted from that time onwards as only New content will be accepted by IFPS after 15/11/12.

i.e.

Date is in the future of transmission time → translate, if necessary

Date is in the past compared to transmission time → send as is

[UR.FPL.2012SWITCH.005]

- (113) The de-fault Date&Time setting shall be **16 Nov. 2012 at 00:00UTC**.

NOTE: A transition 36 hours after the official 15 Nov. date should allow an ANSP to make a clean switch from Old to New during normal working hours.

ANSPs wishing to transition at another time must inform the CFMU.

[UR.FPL.2012SWITCH.006]

- (114) The de-fault Date&Time setting for all unknown 'AD' line addressees shall be **15 Nov. 2012 at 00:00UTC**. AD line addressees known by the CFMU i.e. the address provided is defined for an ANU within the CFMU database, shall have the Date&Time setting applied for the unit concerned.

8.4 Mode 2 Processing

[UR.FPL.2012SWITCH.007]

- (115) IFPS shall accept messages which are entirely in new syntax or which are entirely in old syntax. A mixture of old and new syntax within the same message shall generate an error status. The term 'new' here means new to European procedures and CFMU as oppose to 'new' for ICAO i.e. the presence of DOF/ shall not be treated as 'new'.

Example 1: A message containing any one of the descriptors "E", "J", "M", "P", "Q" in Field 10a will raise an error if at the same time the PBN/ or STS/ATFMX indication is found in Field 18.

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Example 2: A message containing any one of the new descriptors in Fields 10a/b e.g. "J1", shall raise an error if at the same time the indication STS/ATFMEXEMPTAPPROVED is found in Field 18.

[UR.FPL.2012SWITCH.008]

- (116) IFPS shall output messages to ANUs in the format specified for the unit concerned within the CFMU environment database, in accordance with the parameter settings as specified in 8.3..

[UR.FPL.2012SWITCH.009]

- (117) Operational Reply Messages (ORM) generated by IFPS shall, where applicable, provide reference to the processed message using the same Old/New content as that received.

8.5 Mode 3 Processing

[UR.FPL.2012SWITCH.010]

- (118) IFPS shall only accept messages which are entirely in new syntax.

[UR.FPL.2012SWITCH.011]

- (119) IFPS shall output messages to addressees in the format specified for the unit concerned within the CFMU environment database. If the unit concerned has not specified a format or the addressee has been provided via the re-addressing function of IFPS, the output shall be provided in 'new' format.

9 Translation

- (120) The ability of IFPS to output messages with Old content even if received with New content requires a translation facility from 'New' to 'Old'.

[UR.FPL.2012TRANSLATION.001]

- (121) When required to output messages with Old content (see (116) the translation from new to old of Field 10 and Field 18 indicators shall be performed in accordance with the table provided in **ANNEX 1 COM/NAV/SUR TRANSLATION TABLE**.

[UR.FPL.2012TRANSLATION.002]

- (122) When required to output messages with 'Old' content (see (116) the translation from new to old of Field 18 indicators, other than those specified under (121), shall be performed in accordance with the table below.

[UR.FPL.2012TRANSLATION.003]

- (123) The New Field 10b can contain up to 20 characters whereas the Old Field 10b can only contain 2. A choice of indications may therefore be necessary if multiple indications have been made in New. The logic to be applied in such cases is provided in **ANNEX 1 COM/NAV/SUR TRANSLATION TABLE**, para (127).

[UR.FPL.2012TRANSLATION.004]

- (124) Where the translation function requires the inclusion of a descriptor(s) within an existing Field 18 element the additional data shall be provided after the existing data and separated by a space.

[UR.FPL.2012TRANSLATION.005]

- (125) Where the translation function requires the inclusion of more than one descriptor within a Field 18 element only a single occurrence of the Field 18 element shall be provided with a space between descriptors.

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[UR.FPL.2012TRANSLATION.006] updated

- (126) Where the translation function requires the inclusion of more than one of the received New indications within the same Field 18 element they shall be concatenated and added at the end of the descriptors for that element e.g. the translation of Field 10a 'J1' and 'M1' shall result in a Field 18 indication of: DAT/V COM/J1M1 RMK/INMARSAT

'NEW' Field 18 Indication		To be output as below when 'OLD' is required
STS/	ALTRV	STS/ ALTRV
	ATFMX	STS/ ATFMEXEMPTAPPROVED
	FFR	STS/ FFR
	FLTCK	STS/ FLTCK
	HAZMAT	STS/ HAZMAT
	HEAD	STS/ HEAD
	HOSP	STS/ HOSP
	HUM	STS/ HUM
	MARSA	STS/ MARSA
	MEDEVAC	STS/ MEDEVAC
	NONRVSM	STS/ NONRVSM
	SAR	STS/ SAR
	STATE	STS/ STATE
EUR/	PROTECTED	STS/ PROTECTED
SUR/ nnnn		RMK/ SUR nnnn
DEP/, DEST/, ALTN/, RALT/		DEP/, DEST/, ALTN/, RALT/ (Content as received but truncated when necessary)
DOF/		DOF/ for FPL only, Field 18 not to be provided in CHG, CNL, DLA & DEP messages
REG/		REG/ (truncated as necessary ²)
EET/		EET/
SEL/		SEL/
TYP/		TYP/ (truncated if necessary)
CODE/		CODE/
DLE/		Not output.
OPR/		OPR/
ORGN/		Not output.
PER/		PER/
TALT/nnnn		RMK/ TALT nnnn
RIF/		RIF/
NAV/, DAT/, COM/		See; ANNEX 1 COM/NAV/SUR

² If the 'New' registration contains more than one registration i.e. more than the limit (7) for the Old registration, IFPS will attempt to identify and provide only the first registration.

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'NEW' Field 18 Indication	To be output as below when 'OLD' is required
	TRANSLATION TABLE

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ANNEX 1 COM/NAV/SUR TRANSLATION TABLE

The following table has used as a basis the attachment to State letter AN 13/2.1 – 09/9

Guidance for implementation of flight plan information to support Amendment 1 of the Procedures for Air Navigation Services — Air Traffic Management, Fifteenth Edition (PANS-ATM, DOC 4444).

Note: The translation function will rationalise the output so that there is only one occurrence of each indicator in Field 18.

For example, if the NEW contains:

Field 10a: AGM1R

Field 18: PBN/C2S2

then the PRESENT will contain

Field 10a: GRZ

Field 18: NAV/GBAS C2S2 COM/M1 RMK/INMARSAT RNAV2 RNP APRCH BAROVNAV

	'NEW' Data Content		Converts to the following 'OLD' Data Content	
	Field 10a	Field 18	Field 10a	Field 18
NAV / COM	N		N	
	S		VOL	
	SF		S	
	A		Z	NAV/ GBAS
	B		Z	NAV/ LPV
	C		C	
	D		D	
	E1		Z	COM/ E1 RMK/FMC WPR ACARS
	E2		Z	COM/ E2 RMK/DFIS ACARS
	E3		Z	COM/ E3 RMK/PDC ACARS
	F		F	
	G	(NAV/nnnn)	G	(NAV/nnnn)
	H		H	
	I		I	
	J1		J ³ Z	DAT/ V COM/ J1
	J2		JZ	DAT/ H COM/ J2
	J3		JZ	DAT/ V COM/ J3
	J4		JZ	DAT/ V COM/ J4
	J5		JZ	DAT/ S COM/ J5
	J6		JZ	DAT/ S COM/ J6
	J7		JZ	DAT/ S COM/ J7
	K		K	
	L		L	

³ In Old format, the DAT/ element is compulsory if 'J' is present in Field 10a. However, the PRESENT DAT/ element can only contain the descriptors 'S', 'H', 'V', 'M'.

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'NEW' Data Content		Converts to the following 'OLD' Data Content	
Field 10a	Field 18	Field 10a	Field 18
M1		Z	COM/ M1 RMK/INMARSAT
M2		Z	COM/ M2 RMK/MTSAT
M3		Z	COM/ M3 RMK/IRIDIUM
O		O	
P1-P9	Reserved	Not output	
R	PBN/ A1	RZ	NAV/ A1 RMK/RNAV10 RNP10
	PBN/ B1	RZ	NAV/ B1 RMK/RNAV5
	PBN/ B2	RZ	NAV/ B2 RMK/RNAV5
	PBN/ B3	RZ	NAV/ B3 RMK/RNAV5
	PBN/ B4	RZ	NAV/ B4 RMK/RNAV5
	PBN/ B5	RZ	NAV/ B5 RMK/RNAV5
	PBN/ B6	RZ	NAV/ B6 RMK/RNAV5
	PBN/ C1	RZ	NAV/ C1 RMK/RNAV2
	PBN/ C2	RZ	NAV/ C2 RMK/RNAV2
	PBN/ C3	RZ	NAV/ C3 RMK/RNAV2
	PBN/ C4	RZ	NAV/ C4 RMK/RNAV2
	PBN/ D1	PRZ	NAV/ D1 RMK/RNAV1
	PBN/ D2	PRZ	NAV/ D2 RMK/RNAV1
	PBN/ D3	PRZ	NAV/ D3 RMK/RNAV1
	PBN/ D4	PRZ	NAV/ D4 RMK/RNAV1
	PBN/ L1	RZ	NAV/ L1 RMK/RNP4
	PBN/ O1	PRZ	NAV/ O1 RMK/RNP1
	PBN/ O2	PRZ	NAV/ O2 RMK/RNP1
	PBN/ O3	PRZ	NAV/ O3 RMK/RNP1
	PBN/ O4	PRZ	NAV/ O4 RMK/RNP1
	PBN/ S1	GZ	NAV/ S1 RMK/RNP APRCH
	PBN/ S2	GZ	NAV/ S2 RMK/RNP APRCH BARO VNAV
	PBN/ T1	GZ	NAV/ T1 RMK/RNP AR APRCH RF
	PBN/ T2	GZ	NAV/ T2 RMK/RNP AR APRCH
T		T	
U		U	
V		V	
W		W	
X		X	
Y		Y	
Z	COM/ EXM833	See Footnote ⁴	STS/ EXM833
Z	COM/ nnnn	Z	COM/ nnnn
Z	NAV/ RNAVX	See Footnote ⁴	STS/ NONRNAV
Z	NAV/RNAVINOP	See Footnote ⁴	STS/ RNAVINOP
Z	NAV/ nnnn	Z	NAV/ nnnn

⁴ The translation shall result in the removal of the 'Z' if no other data is present within either of the COM/ or NAV/ indicators

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'NEW' Data Content		Converts to the following 'OLD' Data Content	
Field 10a	Field 18	Field 10a	Field 18
Z	DAT/ CPDLCX	<i>See Footnote</i> ⁴	STS/ CPDLCX
Z	DAT/ S, H, V, M or DAT/ nnnn	JZ Z	DAT/ S, H, V, M ⁵ COM/ nnnn ⁵

'NEW' Data Content		Converts to the following 'OLD' Data Content	
Field 10b	Field 18	Field 10b	Field 18
SUR/	N	N	
	A	A	
	C	C	
	E	SD	COM/ E
	H	S	COM/ H
	I	I	
	L	SD	COM/ L
	P	P	
	S	S	
	X	X	
	B1	D	COM/ B1
	B2	D	COM/ B2
	U1	D	COM/ U1
	U2	D	COM/ U2
	V1	D	COM/ V1
	V2	D	COM/ V2
	D1	D	COM/ D1
	G1	D	COM/ G1

Field 10b Choice

- (127) The New Field 10b can contain up to 20 characters whereas the Old Field 10b can only contain two. A choice of indications in Old may therefore be necessary if multiple indications have been made in New. The logic to be applied in such cases shall be in accordance with the following:

First Character

If any of the indicators 'S', 'E', 'H', 'L' is present in New then the first translated character shall be 'S',

Else, If one of the descriptors 'I', 'P' or 'X' is present in New then the first translated character shall be the same 'I', 'P' or 'X' as appropriate

Else, If the descriptor 'C' is present in New then the first translated character shall be 'C',

Else if the descriptor 'A' is present in New then the first translated character shall be 'A',

⁵ The NEW definition of DAT/ allows free text, the OLD definition does not. If the NEW DAT/ is compliant with the OLD definition it shall be retained within DAT/ and a 'J' added in Field 10a, if the NEW DAT/ contains free text it shall be translated into COM/.

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Endif.

Second Character

If any of the indicators 'E', 'L', 'B1', 'B2', 'D1', 'G1', 'U1', 'U2', 'V1', 'V2' is present in New then the second translated character shall be 'D',

Else, no second character.

Endif.

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